Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. **(Previously presented)** A method for detecting multidrug resistance or multidrug resistance potential in a test neoplastic cell, comprising:

a) measuring a level of cell surface-expressed vimentin protein in the test neoplastic cell of a given origin or cell type, and

b) comparing the level of cell surface-expressed vimentin protein in the test neoplastic cell to the level of cell surface-expressed vimentin in a nonresistant neoplastic cell of the same origin or cell type,

wherein the test neoplastic cell is multidrug resistant or has multidrug resistance potential if the level of cell surface-expressed vimentin in the test neoplastic cell is greater than the level of cell surface-expressed vimentin in the nonresistant neoplastic cell of the same given origin or cell type.

2. **(Previously presented)** The method of claim 1, wherein measuring the level of cell surface-expressed vimentin in the test neoplastic cell comprises isolating a cytoplasmic membrane fraction from the cell and measuring the level of vimentin in the cytoplasmic membrane fraction.

3. **(Previously presented)** The method of claim 1, wherein measuring the level of cell surface-expressed vimentin in the test neoplastic cell comprises contacting said cell with an anti-vimentin antibody and measuring the level of antibody bound to cell surface vimentin.

4. **(Previously presented)** The method of claim 3, wherein measuring the level of antibody bound to cell surface vimentin is by immunofluorescence emission.

5. **(Previously presented)** The method of claim 3, wherein measuring the level of antibody bound to cell surface vimentin is by radiolabel.

6. **(Previously presented)** The method of claim 1, wherein the test neoplastic cell is selected from the group consisting of a promyleocytic leukemia cell, a T lymphoblastoid cell, a breast epithelial cell, and an ovarian cell.

7. **(Previously presented)** The method of claim 1, wherein the nonresistant neoplastic cell is from a drug-sensitive cell line selected from the group consisting of HL60, NB4, CEM, HSB2 Molt4, MCF-7, MDA, SKOV-3, and 2008.

8. **(Previously presented)** The method of claim 1, wherein the test neoplastic cell is selected from the group consisting of a lymphoma cell, a melanoma cell, a sarcoma cell, a leukemia cell, a retinoblastoma cell, a hepatoma cell, a myeloma cell, a glioma cell, a mesothelioma cell, and a carcinoma cell.

9. **(Previously presented)** The method of claim 1, wherein the test neoplastic cell is from a tissue selected from the group consisting of blood, bone marrow, spleen, lymph node, liver, thymus, kidney, brain, skin, gastrointestinal tract, eye, breast, prostate, and ovary.

10.-58. **Canceled.**

59. **(Previously presented)** A method for detecting whether a test cell is neoplastic comprising

a) measuring a level of cell surface-expressed vimentin protein in the test cell of a given origin or cell type, and

b) comparing the level of cell surface-expressed vimentin protein in the test cell to the level of cell surface-expressed vimentin in a nonneoplastic cell of the same origin or cell type,

wherein the test cell is neoplastic if the level of cell surface-expressed vimentin in the test cell is greater than the level of cell surface-expressed vimentin in the nonneoplastic cell of the same origin or cell type.

60. **(Previously presented)** The method of claim 59, wherein measuring the level of cell surface-expressed vimentin in the test cell comprises isolating a cytoplasmic membrane fraction from the cell and measuring the level of vimentin in the cytoplasmic membrane fraction.

61. **(Previously presented)** The method of claim 59, wherein measuring the level of cell surface-expressed vimentin in the test cell comprises contacting said cell with an anti-vimentin antibody and measuring the level of antibody bound to cell surface vimentin.

62. **(Previously presented)** The method of claim 61, wherein measuring the level of antibody bound to cell surface vimentin is by immunofluorescence emission.

63. **(Previously presented)** The method of claim 61, wherein measuring the level of antibody bound to cell surface vimentin is by radiolabel.

64. **(Previously presented)** The method of claim 59, wherein the test cell is from a tissue selected from the group consisting of blood, bone marrow, spleen, lymph node, liver, thymus, kidney, brain, skin, gastrointestinal tract, eye, breast, prostate, and ovary.

65. **(Previously presented)** The method of claim 59, wherein the nonneoplastic cell is from a tissue selected from the group consisting of blood, bone marrow, spleen, lymph node, liver, thymus, kidney, brain, skin, gastrointestinal tract, eye, breast, prostate, and ovary.

66.-108. **Canceled.**